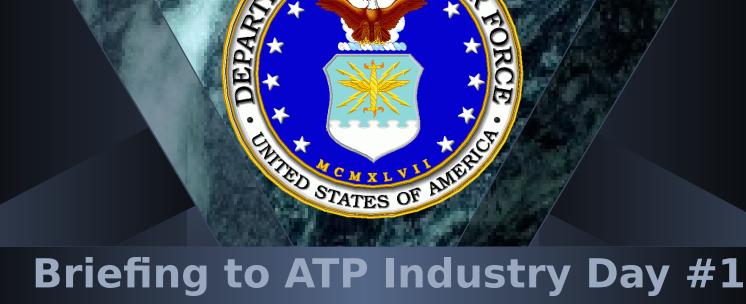
UNCLASSIFIED



Block 50/52 Targeting Pod Requirements

UNCLASSIFIED



Overview



F-16CJ Modifications

- •• CSAF Goals
- • HTS Modernization
- •• Multi-role adds--AAI/TGP
- •• Dual Carriage HTS/TGP
- •• TGP Considerations
- Revised Mod Plans
- TGP Requirements
- Funding strategy (Internal AF Only)



CSAF Interest in F-16CJ Capability

Gen Ryan Direction

• "...I want to put both TGP and HTS pods on the Block 50...
Now!"

MIKE RYAN, Gen, CSAF



What are the Chief's Goals?



Gen Ryan: "I don't need another single-role fighter... I ne the Block 50s to cover multiple mission areas. (Mar 99) Give F-16CJs a true multi-role capability to support EAF operations

One squadron - three missions

Adequately equip existing SEAD squadrons

Operational Contingencies and training

Destructive SEAD (DEAD) potential

 HTS R7 / TGP combination provides potential to find, pinpoint, and destroy mobile SAMs



"The Chief's Words"



TEXT
:UNCLAS
PERSONAL FOR
GEN JUMPER.
INFO GEN
EBERHART, GEN
HAWLEY, GEN
GAMBLE,
GEN NEWTON,
GEN BABBITT

SUBJ: HTS PODS ACQUISITION

 IN RESPONSE TO YOUR HTS CONCERNS, THERE ARE THREE. KEY BLOCK 50 INITIATIVES BEING ADDRESSED TO INCREASE MULTI-ROLE CAPABILITY. THEY ARE HTS R-7, AIR-TO-AIR **INTERROGATOR, AND HTS PODS**. WE ARE PUSHING THESE ISSUES HARD IN THE BUDGET PROCESS AND ARE LOOKING TO ACCELERATE SOME VIA THE FY99 EMERGENCY SUPPLEMENTAL AND THE FY00 UPL. WE WILL CONTINUE TO EMPHASIZE THESE PROGRAMS AND SUPPORT THE CAF'S REQUIREMENT TO ACQUIRE ADDITIONAL HTS PODS TO PROVIDE A "1 FOR 1 + 10%" POD TO AIRCRAFT RATIO DURING THE FY01 APOM/BES. THESE ARE CRITICAL CAPABILITIES THAT ARE VITAL TO OUR EAF OPERATIONS AND WILL ENABLE US TO **DEPLOY ONE BLOCK 50 SQUADRON TO COVER MULTIPLE** MISSION AREAS.

2. ADDITIONALLY, I HAVE ASKED XO TO DEVELOP AN OPTION TO GIVE THE BLOCK 50 TARGETING POD CAPABILITIES IN FY03. THIS WILL PROVIDE US MAXIMUM FLEXIBILITY IN MEETING COMBAT TASKINGS AND ALLOW THE BLOCK 50 TO ACCOMPLISH DESTRUCTIVE SEAD USING PRECISION WEAPONS.



HTS R7 Capability



- Precision Geolocation
 - Multi-ship cooperative ranging
 - • Smaller target location errors permit employment of hard kill ordnance
 - • Minimizes impact of enemy countermeasures
- Precision Identification
 - Potential to update actual EOB
- Improved Training Opportunities
 - Virtual battlefield maximizes training



HTS Pod Force Structure



Req (CC/PA/Spares 10%	1 <u>999</u> () 19	2000 189 19	2001 189 19	2002 189 20	2003 199 21	2004 209 22	2005 219 23	21
Test	10	10	10	10	10	10	10	
<u>Total</u>	<u>218</u>	<u>218</u>	<u>218</u>	<u>229</u>	<u>230*</u>	<u>230</u>	<u>230</u>	
Avail	146	163	173	173	203?	230?	230?	
Shortfall	68	55	45 /	56	27	0	0	

Funded

Unfunded...but on UPLs FY00 30 Pods FY01 30 Pods



Multi-role Capability



Adding AAI and TGP to the HTS gives F-16CJ squadrons the capability to perform three missions

- Force Protection, Precision Strike, S/DEAD
- Maximizes warfighting CINC flexibility
 - Allows commanders to task forces on hand to support changing scenarios
- Significantly reduces logistics requirements



Dual Carriage Capability



Provides another sensor for multi-ship ranging

- Effectiveness of HTS R7 increased with more contributing sensors
- Contributors not limited to primary SEAD players
 - HTS R7 carriage and Link 16 only requirements

Minimizes logistics required to switch missions

Enables maximum flexibility

Increased lethality without increasing force structure





	Tiade

Simultaneous Carriage

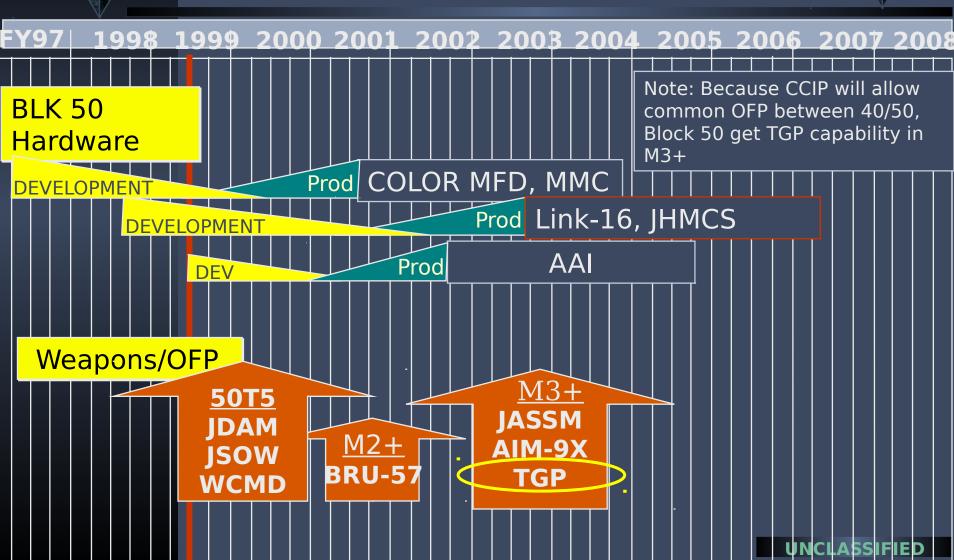
Alt Carriage

Baseline	Ор	tion 1	Option 1	Option 2	2 Option	n 3 Optio	n 4 CCIP
Daseille	QR SW	C-24	QRC-24 SW/HW	50T5+ HW/SW	M2+ HW/S\	M3+ ₩ HW	M3+ //SW SW
Costs	\$7.	.5M	\$14.6M	\$29.21	M \$18. (5M \$13	<mark>.3M</mark> \$3M
Schedule 03		7 mo	17 ma	23 mo) Jan ()2 Oct	03 Sep
Impact delay N	lone	DTS/N	uc Dī	S/Nuc D	TS/Nuc	M3+ dela	y M3+
delay 1		/40T6	Degr 6 mos	HTS M3	+ delay 6	mos	2 mos



Block 50/52 Upgrade Plan







CONSIDERATIONS FOR TGP TYPE FOR BLOCK 50/52



Which TGP? LANTIRN/SNIPER, LITENING II, Terminator, other?

- Need TGP sensor to target JDAM/JSOW/LGBs
- Need for 3rd Gen FLIR & 40K laser are "must haves"
 - Pod interchangeability is "must have"
- A-G Auto Tgt Recognition / CID is "nice to have"

How many pods?

- 8 per squadron + 10% spares = 99
 - CSAF optioned for 100 total buy



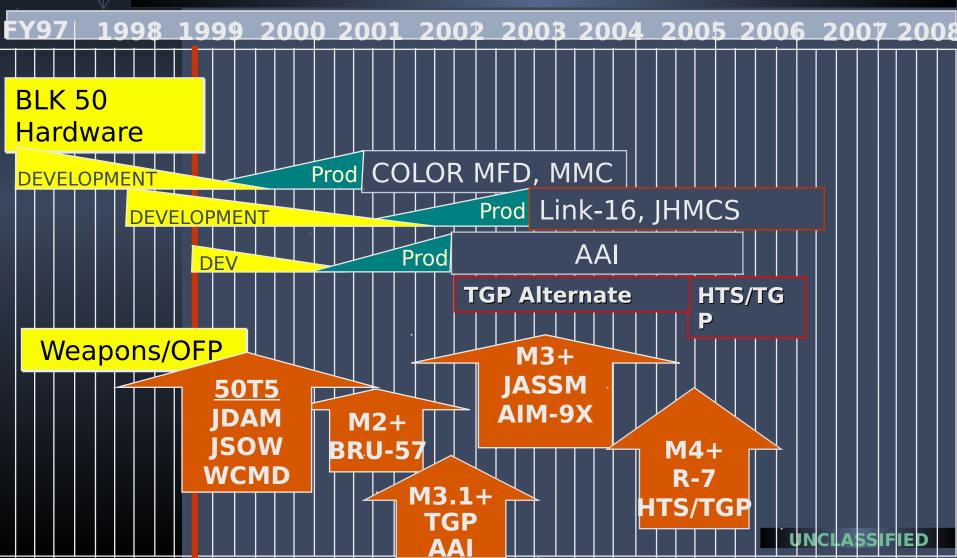
CSAF Decisions

- 30 Apr: CSAF presented with refined options on implementing HTS/TGP capability and associated impact on F-16 program
- CSAF decided to delay implementation of Dual carriage in order to avoid slipping CCIP capability including Link-16, AAI, JHMCS, CMFDS, and MMC
- Optioned for implementation of alternating carriage in FY02/03 in M3+ and dual carriage in FY 05 in M4+
- Optioned for 100 TGPs for the Block 50/52 fleet



Block 50/52 Modified Upgrade Plan







What's Next?



- Budget resolution options for TGP
 - •• FY01 ABES bill
- Budget resolution for HTS pods
 - • FY00/01 Supplemental
- ORD amendments
 - •• F-16 Block 50 ORD being revised for TGP
 - ACC writing ATP ORD



TGP Requirements



- TGP needs ability to derive target coordinates accurate enough for J Series weapons at "X" range
- Drives requirement for accurate LASER ranging and software to reduce Lat/Long errors for GPS weapons
- Need ability to "verify" pre-planned coordinates are on correct target...TARGET ID at range
- Need the best industry has to offer...but as a non-developmental item...time is a driver
 - Plan is for FY01 procurement start

Bottomline: The Block 50 TGP will be used as a targeting sensor for J-series weapons as well as for targeting LGBs









Major Scott "Spade" Williams Pentagon, F-16 PEM